TRA	NSMITTA	L OF INFORMA (Under 37 CER	ATEMENT		cket No. my172			
In Re A	In Re Application Of: Ulrich et al. JUL 0 6 2004							
Appli	cation No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.		
10/	/002,784	11/26/01	Nita Minnifield	000041022	1645	6261		
Title:	Bacterial Su	perantigen Vaccines						
						:		
			Address to: Commissioner for Paten P.O. Box 1450 Alexandria, VA 22313-14					
			37 CFR 1.97(b)					
1. 🗵								
			37 CFR 1.97(c)					
2. 🗆	CFR 1.97(l Final Actio	o), provided that the n under 37 CFR 1.	tement submitted herewith is Information Disclosure State 113, a Notice of Allowance the application, and is accomp	ment is filed be under 37 CFF	efore the mailing R 1.311, or an <i>i</i>	g date of a		
	☐ the s	statement specified in	n 37 CFR 1.97(e);					
			OR					
	☐ the f	ee set forth in 37 CF	R 1.17(p).					
:								
						-		
						-		

TRANSMITTA		cket No. my172						
In Re Application	JUL	0 6 2004						
Application No.	Filing Date	Examine	r	Customer No.	Group Art Unit	Confirmation No.		
10/002,784 11/26/01 Nita Minnifield 000041022			1645	6261				
Bacterial Su	Bacterial Superantigen Vaccines							
		Payme	ent of Fee					
	(Only cor	mplete if Applicant elect	ts to pay the f	ee set forth in 37	CFR 1.17(p))			
□ A check in the amount of is attached.  ☑ The Director is hereby authorized to charge and credit Deposit Account No. 21-0380  as described below. □ Charge the amount of □ Credit any overpayment. ☑ Charge any additional fee required.  Certificate of Transmission by Facsimile*  Certificate of Mailing by First Class Mail  I certify that this document and authorization to charge deposit account is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. □ (Date)  I certify that this document and fee is being deposited on with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.						esited on as first class ased to the		
Typed or P	Printed Name of Person Sig	ning Certificate	Typ	ed or Printed Name	of Person Mailing Co	ertificate		
*This certificate may only be used if paying by deposit account.  Typed or Printed Name of Person Mailing Certificate  Typed or Printed Name of Person Mailing Certificate								
Marlana Titus, Reg.	Dated: July 6, 2004							
for Elizabeth Arwin								
Attorney for applica								
-	Research and Materi	el Command						
504 Scott Street Fort Detrick, MD 21	702-5012							
(301) 977-7227	1/02-3012					•		
						-		

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of Ulrich et al.

Appln. No.: 10/002,784 Group Art Unit: 1645

Filed: November 26, 2001 Examiner: N. Minnifield

Title: Bacterial Superantigen Vaccines

July 6, 2004

## LETTER ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of Patents and Trademarks Alexandria, VA 22313-1450

Sir:

Supplemental to the Information Disclosure Statement and PTO-1449 Form submitted July 6, 2004, along with the Request for Continued Examination, we submit the following comments regarding the references cited on the PTO-1449 Forms and submitted.

Among the references cited in the PTO-1449 form, the following are considered to likely be found the most relevant to allowed claims 32 and 43:

Kappler et al., "VB-Specific Stimulation of Human T Cells by Staphylococcal Toxins", 1989, Science, vol 244, pages 811-813.

Karlsson, et al., "Kinetic analysis of monoclonal antibody-antigen interactions with a new biosensor based analytical system", J. Immunological Methods, 145 (1991), pages 229-240.

Jonsson et al., "Real-Time Biospecific Interaction Analysis Using Surface Plasmon Resonance and a Sensor Chip Technology", Biotechniques, Vol. 11, No. 5, 1991, pages 620-627.

Prasad et al., "Structure of Toxic Shock Syndrome Toxin 1", Biochemistry, Accelerated Publications, Vol. 32, No. 50, 1993, pages 13761-13766.

Acharya, et al., "Structural basis of superantigen action inferred from crystal structure of toxic-shock syndrome toxin-1", Nature, Vol. 367, Jan. 6, 1994, pages 94-97.

ULRICH et al. – Serial No. 10/002,784 Letter Accompanying IDS filed July 6, 2004

Swaminathan et al., "Crystal structure of staphylococcal enterotoxin B, a superantigen", Nature, Vol. 359, October 29, 1992, pages 801-806.

Ulrich et al., "Staphylococcal enterotoxins A and B share a common structural motif for binding class II major histocompatibility complex molecules", Nature Structural Biology, Vol. 2, No. 6, June 1995, pages 554-560.

Kuo et al., "Role of Streptococcal Pyrogenic Exotoxin B in the Mouse Model of Group A Streptococcal Infection", Infection and Immunity, Aug. 1998, Vol. 66, No. 8, pages 3931-3935.

Kapur et al., "A conserved Streptococcus pyogenes extracellular cysteine protease cleaves human fibronectin and degrades vitronectin", Microbial Pathogenesis, 1993, Vol. 15, pages 327-346.

Kapur et al., "Cleavage of interleukin 1B (IL-1B) precursor to produce active IL-1B by a conserved extracellular systeine protease from Streptococcus pyogenes", Proc. Natl. Acad. Sci. USA, Vol 90, August 1993, pages 7676-7680.

Kagawa et al., "Crystal structure of the zymogen form of the group A Streptococcus virulence factor SpeB: And integrin-binding cysteine protease", PNAS, Feb. 29, 2000, Vol. 97, No. 5, pages 2235-2240.

Gubba et al., "Replacement of Histidine 340 with Alanine Inactivates the Group A Streptococcus Extracellular Cysteine Protease Virulence Factor", Infection and Immunity, June 2000, Vol. 68, No. 6, pages 3716-3719.

Stiles et al., "Toxicity of Staphyloccal Enterotoxins Potentiated by Lipopolysaccharide: Major Histocompatibility Complex Class II Moelcule Dependency and Cytokine Release", Infection and Immunity, Dec. 1993, Vol. 61, No. 12, pages 5333-5338.

Baker et al., "Structural features of a zinc binding site in the superantigen streptococcal pyrogenic exotoxin A (SpeA1): Implications for MHC class II recognition," Protein Science, 2001, Vol. 10, pages 1268-1273.

Roggiani, et al., "Analysis of Toxicity of Streptococcal Pyrogenic Exotoxin A Mutants", Infection and Immunity, July 1997, Vol. 65, No. 7, pages 2868-2875.

Kline et al., "Analysis of the Superantigenic Activity of Mutant and Allelic Forms of Streptococcal Pyrogenic Exotoxin A", Infection and Immunity, Vo. 64, No. 3, March 1996, pages 861-869.

ULRICH et al. – Serial No. 10/002,784 Letter Accompanying IDS filed July 6, 2004

We provide this suggestion that these references are likely more relevant than the others submitted today, only for the purpose of being helpful to the Examiner. We understand that the Examiner, upon review of <u>all</u> of the references, may deem that different or additional references may be more relevant to examination.

If the Examiner has any questions, or would like to discuss any of the references, she is invited to contact the applicant's representative Marlana K. Titus, at 301-977-7227. (Please note that this is a new telephone number.)

Respectfully submitted,

Marlana Titus, Reg. No. 35,843

For Elizabeth Arwine, Reg. No. 45,867

Attorney for Applicant

U.S. Army Medical Research and Materiel

Command, Attn: MCMR-JA

Fort Detrick, Maryland 21702-5012

Marlana K. Titus, Esq. Nash & Titus, LLC (301) 977-7227

					Docket Number (Optional) Army17	Docket Number (Optional) Application Number  Army172 10/002,784				
OIP	INFO	RMA	TION DISCLOSURE (Use several sheets if necessar	CITATION	Applicant(s) Ulrich et al.	Ulrich et al.				
JUL 0 6	2004	$z_{I}$	,		Filing Date November 26		Group Art Unit	645		
302		8	·	U.S. PA	ATENT DOCUMENTS					
EXAMINERA INITIAL	DEMIN		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING		
	-								-	
		1								
		<u> </u>								
					DOLLA TION DUDI ICATIONS					
*EXAMINER		1		<del></del>	PPLICATION PUBLICATIONS			FILING	DATE	
INITIAL	REF	<u> </u>	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	IF APPRO		
								ļ		
				FOREIGN	N PATENT DOCUMENTS					
	REF		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Transi YES	ation NO	
		10.000								
		<u> </u>	· · · · · · · · · · · · · · · · · · ·							
			,,,							
				OTHER DO	CUMENTS (Including Au	thor, Title, Date. I	Pertinent Pages, E	[] (c.)		
		-	Kappler et al., "VB-Spe		Human TCells by Staphyloco				811-813.	
		A	Ş1							
-			Karlsson, et al., "Kinet	c analysis of monoc	lonal antibody-antigen interac 991), pages 229-240.	tions with a new	biosensor base	d analytical		
		В	system", J. 1mmunologi	cai wiethous, 145 (1	771), pages 227-240.					
EXAMINE	ER.				DATE CONSIDERED					
EXAMINE not conside	ER: Ini ered. I	tial if o	citation considered, whether e copy of this form with next	or not citation is in co communication to app	nformance with MPEP Section 60 plicant.	09; Draw line thro	ough citation if no	t in conform	ance and	

Form PTO-A820 (also form PTO-1449) P09A/REV05

Patent and Trademark Office \* U.S. DEPARTMENT OF COMMERCE

h.		Docket Number (Optional)	Application Number	
		Army172	10/002,784	
INEORN	ATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant(s) Ulrich et al.		
1	1 6 2004 A	Filing Date November 26, 2001	Group Art Unit	
*EXAMINER -	THER DOCUMENTS (Including Author,			
INITIAL	n de Son et al., "Real-Time Biospecific Interaction	Analysis Using Surface Plasmon Re	sonance nad a Sensor Chin Technology"	
c	Blotechniques , Vol. 11, No. 5, 1991, pages 620-62	77.	Sometime in a constant of the	
D	Prasad et al., "Structure of Toxic Shock Syndron pages 13761-13766.	ne Toxin 1", Biochemistry, Accelerat	ed Publications, Vol. 32, No. 50, 1993,	
E	Acharya, et al., "Structural basis of superantigen Nature, Vol. 367, Jan. 6, 1994, pages 94-97.	action inferred from crystal structu	re of toxic-shock syndrome toxin-1",	
F	Swaminathan et al., "Crystal structure of staphy pages 801-806.	lococcal enterotoxin B, a superantige	n", Nature, Vol. 359, October 29, 1992,	
G	Ulrich et al., "Staphylococcal enterotoxins A and B share a common structural motif for binding class II r histocompatibility complex molecules", Nature Structural Biology, Vol. 2, No. 6, June 1995, pages 554-566			
Н	Kuo et al., "Role of Streptococcal Pyrogenic Exo and Immunity, Aug. 1998, Vol. 66, No. 8, pages 3	toxin B in the Mouse Model of Group 931-3935.	A Streptococcal Infection", Infection	
I	Kapur et al., "A conserved Streptococcus pyogen vitronectin", Microbial Pathogenesis, 1993, Vol.	es extracellular cysteine protease cle 15, pages 327-346.	aves human fibronectin and degrades	
	Kapur et al., "Cleavage of interleukin 1B (IL-1B protease from Streptococcus pyogenes", Proc. Na	precursor to produce active IL-1B	by a conserved extracellular systeine	
J	protease from Streptococcus pyogenes", Proc. Na	iti. Acad. Sci, USA, Voi 90, August 1:	993, pages 7070-7000.	
K	Kagawa et al., "Crystal structure of the zymoger integrin-binding cysteine protease", PNAS, Feb.	form of the group A Streptococcus 29, 2000, Vol. 97, No. 5, pages 2235-2	virulence factor SpeB: And 2240.	
L	Gubba et al., "Replacement of Histidine 340 with Protease Virulence Factor", Infection and Immu	Alanine Inactivates the Group A St nity, June 2000, Vol. 68, No. 6, pages	reptococcus Extracellular Cysteine 3716-3719.	
М	Stiles et al., "Toxicity of Staphyloccal Enterotoxi Class II Moelcule Dependency and Cytokine Rela	ns Potentiated by Lipopolysaccharid ease", Infection and Immunity, Dec.	e: Major Histocompatibility Complex 1993, Vol. 61, No. 12, pages 5333-5338.	
N	Baker et al., "Structural features of a zinc bindin Implications for MHC class II recognition," Prof	ng site in the superantigen streptococ lein Science, 2001, Vol. 10, pages 126	cal pyrogenic exotoxin A (SpeA1): 8-1273.	
EXAMINER		DATE CONSIDERED		
*EXAMINER: Initial not considered. Include	if citation considered, whether or not citation is in confor de copy of this form with next communication to applican	mance with MPEP Section 609; Draw lin	e through citation if not in conformance and	

a, J.	0		Docket Number (Optional)	Application Number	
		ON THE STATE OF TH	Army172 Applicant(s)	10/002,784	
INE		THON DISCLOSURE CITATION  Ose several sheets if necessary)	Ulrich et al.		
	u 0 6	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Filing Date November 26, 2001	Group Art Unit 1645	
*FYAMINED	11 11 15	OTHER DOCUMENTS (Including Author, Title	e, Date, Pertinent Pages, Etc.)		
INITIAL	Parrias	Roggiani, et al., "Analysis of Toxicity of Streptococ Vol. 65, No. 7, pages 2868-2875.		Infection and Immunity, July 1997,	
	0	3701. 65, No. 7, pages 2868-2875.			
	Kline et al., "Analysis of the Superantigenic Activity of Mutant and Allelic Forms of Streptococcal Pyrogenic Exoto Infection and Immunity, Vo. 64, No. 3, March 1996, pages 861-869.				
		Schlievert, "Role of Superantigens in Human Disea	se", J. of Infectious Diseases, 1993, Vo	ol. 163, pages 997-1002.	
	Q				
	R	Schlievert et al., "Identificationand Characterizatic Syndrome", J. Infectious Diseases, Vol 143, No. 4, A	on of an Exotoxin from Staphylococcu April 1981.	s arueus associated with Toxic-Shock	
	s	Schwab et al., "Superantigen Can Reactivate Bacte 1993, pages 4151-4159.	rial Cell Wall-Induced Arthritis", J.	Immunology, Vol. 150, No. 9, May 1,	
	Т	Karlsson et al., "Kinetic analysis of monoclonal and J. Immunological Methods, Vol. 145 (1991), pages 2	tibody-antigen interactions with a new 229-240.	biosensor based analytical system",	
	U	Nabozny et al., "HLA-DQ8 Transgenic Mice Are F Human Polyarthritis", J. Exp. Med, Vol. 183, Jan.	lighly Susceptible To Collagen-induce 1996, pages 27-37.	d Arthritis: A Novel Model For	
	v	Hudson et al., "Two Adjacent Residues in Staphylo Exp. Med., Vol. 177, Jan. 1993, pages 175-184.	ococcal Enterotoxins A and E Determi	ne T Cell Receptor VB Specificity'', J.	
	w	Panina-Bordignon et al., "Identification of HLA-D Toxin Superantigen", J. Exp. Med., Vol. 176, Dec.	1992, pages 1779-1704.	. 1	
	x	Yakei, et al., "Intravenous Immunoglobulin Contai Toxin Superantigens", J. Clin. Invest., vol. 91, Feb	ins Specific Antibodies Inhibitory to A . 1993, pages 602-607.	ctivation of T Cells by Staphylococcal	
	Y	Sundstrom, et al., "The Co-crystal Structure of Sta Biological Chemistry, vol 271, No. 50, Dec. 13, 199	nphylococcal Enterotoxin Type A Wit 6, pages 32212-32216.	h Zn2+ at 2.7 A Resolution", J.	
	z	Gubba et al., "Replacement of Histidine 340 with A Protease Virulence Factor", Infection and Immuni	Alanine Inactivates the Group A Strep ty, Vol. 68, No. 6, June 2000, pages 37	toccus Extracellular Cysteine 16-3719.	
EXAMINER			DATE CONSIDERED		
*EXAMINER: not considered.	Initial if Include	citation considered, whether or not citation is in conformation of this form with next communication to applicant.	ance with MPEP Section 609; Draw line t	prough citation if not in conformance and	

P09B/REV04

		To the North Continue D	A 12 a 42 a Minishan
. Y	,	Docket Number (Optional) Army172	Application Number 10/002,784
	ATON DISCLOSURE CITATION (Use sayeral sheets if necessary)	Applicant(s) Ulrich	
/ /	<i>℃</i> /	Filing Date November 26, 2001	Group Art Unit
any a south	6 2004	November 26, 2001	
*EXAMINER INITIAL	HER DOCUMENTS (Including Author, Title	tle, Date, Pertinent Pages, Etc.)	
AA AA	HER DOCUMENTS (Including Author, Title Charles) et al., "A Globally Disseminated M1 Subclor From the Prophage DNA and Capacity for High-Frequency In pages 5592-5597.	ne of Group A Steptocci Differs from on intracellular Invasion,"Infection and I	Other Subclones by 70 Kilobases of Immunity, Vol. 66, No. 11, Nov. 1998,
вв	Kuo et al., "Role of Streptococcal Pyrogenic Exotox Immunity, Vol. 66, No. 8, Aug. 1998, pages 3931-393	kin B in the Mouse of Group A Strepto	ococcal Infection", Infection and
сс	Harokopakis et al., "Mucosal Immunogenicity for a Absence of Presence of Coexpressed Cholera Toxin pages 1445-1454.	Reombinant Salmonella typhimurium A2 and B Subunits", Infection and Ir	n-cloned Heterologous Antigen in the nmunity, April 1997, Vol. 65, No. 4,
DD	Bavari and Ulrich, "Staphylococcal Enterotoxin A a Histocompatibility Complex Class II Binding", Infe	and Toxic Shock Syndrome Toxin Corection and Immunity, Feb. 1995, Vol. 6	mpete with CD4 for Human Major 53, No. 2, pages 423-429.
EE	Stiles, et al., "Toxicity of Staphylococcal Enterotoxi Copmplex Class II Molecule Dependency and Cytol 5333-5338.	ins Potentiated by Lipopolysaccharide kine Release", Infection and Immunity	:: Major Histocompatibility y, Dec. 1993, Vol. 61, No. 12, pages
FF	Taneja and David, "HLS class II transgenic mice as 67-79.	s models of human diseases", Immuno	logical Reviews 1999, Vol. 169, pages
GG	Takimoto et al, "Stimulation of all T cells bearing V Immunol., 1990, Vol. 20, pages 617-621.	/B1, VB3, VB11 and Vb12 by staphylo	occal enterotoxin A'', Eur. J.
нн	Sundstrom et al., "The crystal structure of staphylo EMBO Journal, Vol. 15, No. 24, pages 6832-6840, 1	ococcal enterotoxin type D reveals Zn2 1996.	?+-mediated homodimerization", The
п	Bavari et al., "Divergence of Humand and Nonhum: Immunology and Immunopathology, Vol. 76, No. 3,	and Primate Lymphocyte Responses t Sept. 1995, pages 248-254.	o Bacterial Superantigens", Clinical
JJ	Carlsson and Sjogren, "Kinetics of IL-2 and Interfe Human Mononuclear Cells Exposed to Staphylococo	eron-y Production, Expression of IL-2 cal Enterotoxin A", Cellular Immuno	Receptors, and Cell Prioiferation in logy, 96, pages 175-183 (1985).
KK	White et al., "The VB-Specific Superantigen Staphy Deletion in Neonatal Mice", Cell, Vol. 56, Jan. 13, 1	ylococcal Enterotoxin B: Stimulation of 1989, pages 27-35.	of Mature T Cells and Clonal
LL	Jonsson et al., "Real-Time Biospecific Interaction A BioTechniques, Biofeature, Vol. 11, No. 5, 1991, pag	Inalysis Using Surface Plasmon Reson ges 620-627.	ance and a Sensor Chip Technology"
EXAMINER		DATE CONSIDERED	
	f citation considered, whether or not citation is in conformate copy of this form with next communication to applicant.	nce with MPEP Section 609; Draw line the	rough citation if not in conformance and

			Docket Number (Optional)	Application Number		
		OIPE	Army172	10/002,784		
INF	ORM	ATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant(s) Ulrich	•		
		(Use several sheets if necessary)  JUL 0 6 2004	Filing Date November 26, 2001	Group Art Unit 1645		
*EXAMINER		HADE	le, Date, Pertinent Pages, Etc.)			
INITIAL	-	Publications, Vol. 32, No. 50, Dec. 21,				
1993, pages 13761-13766.						
	IANIAI					
15	<del>                                     </del>	Herman et al., "Superantigens: Mechanism of T-Ce Vol. 9, pages 745-772.	ell Stimulation of Role in Immune Res	ponses", Annu. Rev. Immunol., 1991,		
	NN	voi. 3, pages /43-//4.				
		Kreiswirth et al, "Cloning and expression of strepo toxin-1 in Bacillus subtilis", Mol. Gen. Genit. (1987)	coccal pyrogenic exotoxin A and stap	hylococcal toxic shock syndrome		
	00	toxiii-1 iii Daciiius subtilis , iviol. Gell. Gellic (1707	,, , on 200, pages 07:07:			
_				and the second of the second o		
		Bohach et al., "Staphylococcal and Streptococcal P Illnesses", Microbiology, 1990, Vol. 17, Issue 4, pag	yrogenic Toxins Involved in Toxic Shoes 251-272.	ock Syndrome and Related		
	PP	, , , , , , , , , , , , , , , , , , , ,				
				##0 #00 (1000)		
		Bergdoll, "Enterotoxins", Staphylocci and Staphylocci	ococcal Infections, 2, chapter 16, page	s 559-598, (1983).		
	QQ					
				4		
	17.7	Anderson et al., "Delivery of the Pertactin/P.69 pol typhimurium vaccine strain: expression levels and it	ypeptide of Bordetella pertussis using immune response'', Vaccine, 1996, Vo	an attenuated Salmonella l. 14, No. 14, pages 1384-1390.		
	RR					
		Ulrich et al., "Bacterial superantigens in human dis	sease: structure, function and diversity	v." Trends in Microbiology, Vol 3.		
		No. 12, Dec. 1995, pages 463-468.	rease. Sti ucture, renetion and arreisit,	,,		
	ss					
		Posnett, "Do superantigens play a role in autoimmi	unity?", seminars in Immunology. Vo	l. 5, 1993, pages 65-72.		
		20 Superantigens ping a role in automini		, , , , ,		
	TT					
		Kim et al., "Toxic Shock Syndrome Toxin-1 Compl	lexed with a Class II Major Histocom	patibility molecule HLA-DR1",		
		Science, Nov. 266, Dec. 16, 1994, pages 1870-1874.	-			
	บบ					
		Marrack and Kappler, "The Staphylocollal Entero	toxins and Their Relatives", Sciences,	, Vol. 248, Articles, May 11, 1990,		
	1/27	pages 705-711.				
	vv					
		Mollick et al., "Class II MHC Molecules Are Speci	fic Receptors for Staphylococcus Ente	erotoxin A", Science, Vol 244,		
l, l	ww	Reports, May 19, 1989, pages 817-820.				
	" "					
		Kappler et al., "VB-Specific Stimulation of Human	T Cells by Staphylococcal Toxins", S	Science, Vol. 244, Reports, May 19,		
W W	xx	1989, pages 811-813.				
				•		
EXAMINER			DATE CONSIDERED			
				÷		
*EXAMINER:	nitial if	citation considered, whether or not citation is in conforma	nnce with MPEP Section 609; Draw line th	rough citation if not in conformance and		

not considered. Include copy of this form with next communication to applicant.

## Application Number Docket Number (Optional) 10/002,784 Army172 INFORMATION DISCLOSURE (14) Applicant(s) Ulrich (Use several sheets if necessary) JUL 0 6 2004 Filing Date Group Art Unit 1645 November 26, 2001 OTHER DOCUMEN (Including Athor, Title, Date, Pertinent Pages, Etc.) \*EXAMINER INITIAL Kagawa et al., "Crystal structure of the zymogen form of the group A Streptococcus virulence factor SpeB: An integrin-binding cysteine protease", PNAS, Vol. 97, No. 5, Feb. 29, 2000, pages 2235-2240. YY Medaglini et al., "Mucosal and systemic immune responses to a recombinant protein expressed on the surface of the oral commensal bacterium Streptococcus gordonii after oral colonization", PNAS, USA, Vol. 91, July 1995, pages 6868-6872. 7.7. Kapur, et al.,"Cleavage of interleukin 1B (IL-1B) precursor to produce active IL-1B by a conserved extracellular cysteine protease from Streptococcus pyogenes", PNAS, Sci, USA, Vol. 90, Aug. 1993, pages 7676-7680. AAA Fraser et al., "Zinc regulates the function of two superantigens", PNAS, Sci, USA, Vol 89, June 1992, pages 5507-5511. BBB Choi et al, "Interaction of Staphylococcus aureus toxin 'superantigens' with human T cells", PNAS Sci. USA, Vol. 86, Nov. 1989, pages 8941-8945. CCC Goldenberg and Reed, "Bacterial Arthritis", The New England Journal of Medicine, Vol. 312, No. 12, March 21, 1985, pages 764-771. DDD Ulrich et al., "Staphylococcal enterotoxins A and B share a common structural motif for binding class II major histocompatibility complex molecules", Nature Structrual Biology, Vol. 2. No. 6, June 1995, pages 554-560. EEE Jardetzky et al., "Three-dimensional structure of a human class II histocompatibility molecule complexed with superantigen", Nature, Vol. 368, April 21, 1994, pages 711-718. FFF Acharya et al., "Structural basis of superantigen action inferred from cyrstal structure of toxic-shock syndrome toxin-1", Nature, Vol 367, Jan. 6, 1994, pages 94-97. GGG Swaminathan et al., "Crystal structure of staphylococcal enterotoxin B, a superantigen", Nature, Vol. 359, Oct. 29, 1992, pages 801-806. ннн Kawabe and Ochi, "Programmed cell death and extrathymic reduction of VB8+ CD4+ T cells in mice tolerant to Staphylococcus aureus enterotoxin B", Nature, Nol. 349, Jan 17, 1991, apges 245 -248. Ш

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and

JJJ

not considered. Include copy of this form with next communication to applicant.

**EXAMINER** 

Fraser, "High-affinity binding of staphyloccal enterotoxins A and B to HLA-DR", Nature, VOI. 339, May 18, 1989, pages 221-223.

DATE CONSIDERED

			NPE	Docket Number (Optional)	Application Number	
			```` <b>`</b> \	Army172	10/002,784	
INF		ATION DISCLOSURE CITA	JUL 0 6 2004	Applicant(s) Ulrich		
		(Use several sheets if necessary)	JUL U O ZOON IS	Filing Date	Group Art Unit	
		<b>/</b>		November 26, 2001	1645	
*EXAMINER INITIAL				itle, Date, Pertinent Pages, Etc.)		
INTIAL		Kapur et al., "A conserved Str	eptococcus pyogene	s extracellular cysteine protease cleave 3, pages 327-346.	es human fibronectin and degrages	
	KKK	Vitronectin , witerobiai ratnog	genesis, voi. 13, 177	5, pages 527-540.		
•	KKK					
		Schievert, "Staphylococcal ent	erotoxin B and toxi	c-shock syndrome toxin-1 are significa	ntly associated with non-menstrual	
	Schievert, "Staphylococcal enterotoxin B and toxic-shock syndrome toxin-1 are significantly associated with non-menstrual TSS", The Lancet, May 17, 1986, pages 1149-1150.					
	LLL				:	
1						
	11-3					
					X	
			· <u> </u>			
:			•			
					1/1	
4:- 2 (1)						
EVAMINED				DATE CONSIDERED		
EXAMINER				DATE CONSIDERED		
*EXAMINER:	EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and					

not considered. Include copy of this form with next communication to applicant.